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EXAMINER

TON, DANG T

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 04/09/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/157,758

Applicant(s)

KAMEL ET AL.

Examiner

DANG T TON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. Claims 1-8 are objected to under 37 C.F.R 1.75 because of the following formalities:

In claim 1 line 4, " a mobile unit" seems to refer back to " a mobile unit" recited at line 1. If this is true, it is suggested to change " a mobile unit" to ---- the mobile unit ----.

Claims 2-8 are objected since they depend from claim 1.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8, 9, 12, 13, 15, 18, and 21-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Love et al (newly cited 6,034,971).

For claim 1, Love et al. disclose a wireless communications system having a base station (see column 3 line 11) and a mobile unit (see column 3 line 12) , a method for setting initial power levels between the mobile unit and the base station upon receipt of a service request (see column 6 lines 51-56) , the method comprising the steps of: calculating an interference measure from a mobile unit received pilot power generated by the base station (see column 3 lines 50-60) ; and setting an initial power level in a forward

link based on the interference measure (see column 4 lines 26-42).

For claim 2, love et al. disclose a method wherein the step of calculating determines a difference between the mobile unit received pilot power and a base station transmitted pilot power(see column 3 lines 11-19).

For claim 3, Love et al. disclose a method wherein the mobile unit received pilot power and the base station transmitted pilot power are defined by the ratio  $E_c/I_o$ , and wherein each the  $E_c/I_o$ , represents a ratio between energy per chip to interference density (see equation 1 in column 3 line 62).

For claim 4, Love et al. disclose a method wherein the mobile unit received pilot power is included a request for services transmission from the mobile unit (see column 6 lines 40-45).

For claim 5, Love et al. disclose a method wherein the interference measure indicates interference levels due to other base station and mobile receive noise (see other cells at column 3 lines 52-53)

For claim 6, love et al. disclose a method wherein the interference measure being linearly related to the initial power level (see column 4 lines 53-55).

For claim 8, love et al. disclose a method wherein the mobile unit received pilot power is included in an access channel transmission from the mobile unit(see column 9 lines 42-55).

For claim 9, Love et al. disclose a wireless communications system having a base station (see column 3 line 11) and a mobile unit (see column 3 line 12) , a method for setting up a call between the mobile unit and the base station,

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the method comprising the steps of:

receiving a request for services over an access channel from the mobile unit (see column 9 lines 42-55 and column 6 lines 51-56);  
determining an interference measure from a mobile unit received pilot power received over said access channel (see column 3 lines 50-60);  
and setting an initial power level in a forward link traffic channel transmission based on said interference measure (see column 4 lines 26-42).

For claim 12, Love et al. disclose a method wherein the interference measure indicates interference levels due to other base station/ other cells and mobile receiver noise (see column 3 lines 52-53),

For claim 13, Love et al. disclose a method wherein the interference measure is linearly related to the initial power level (see column 4 lines 53-55).

For claim 15, Love et al. disclose a wireless CDMA based communications system having a base station (see column 3 line 11) and a mobile unit (see column 3 line 12), a method for setting up a call between the mobile unit and the base station (see column 6 lines 51-56), the method comprising the steps of: receiving an access probe from the mobile unit (see column 4

lines 28-29);

determining an interference measure from a mobile unit received pilot power transmitted in the access probe (see column 3 lines 50-60);

and setting an initial power in a forward link traffic channel transmission based on the interference measure (see column 4 lines 26-42).

For claim 18, Love et al. disclose a method wherein the interference measure indicates interference levels due to other base station/ other cells and mobile receiver noise (see column 3 lines 52-53),

For claim 21, love et al. disclose a wireless communications system having a base station (see column 3 line 11) and a mobile unit (see column 3 line 12), a method for setting initial power levels (see column 4 lines 26-42) between the mobile unit and the base station, the method comprising the steps of  
receiving a base station transmitted pilot power (see column 3 lines 50-60);  
calculating an interference measure from a mobile unit pilot power and the base station transmitted pilot power (see column 3

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lines 50-60);

and a setting an initial power level in a forward link based on said interference measure (see column 4 lines 26-42).

For claim 22, Love et al. disclose a method wherein the step of calculating determines a difference between the mobile unit received pilot power and the base station transmitted pilot power (see column 3 lines 11-19).

For claim 23, love et al. disclose a method wherein the mobile unit received pilot power and the base station transmitted pilot power are defined by the ratio  $E_c/I_o$ , and wherein each the  $E_c/I_o$  represents a ratio between energy per chip to interference density (see equation 1 in column 3 line 62).

For claim 24, Love et al. disclose a method wherein the interference measure indicates interference levels due to other base station/ other cells and mobile receiver noise (see column 3 lines 52-53),

For claim 25, love et al. disclose a method wherein the interference measure is linearly related to the initial power level (see column 4 lines 53-55).

3. This application currently names joint inventors. In considering patentability of the claims under 35

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U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10,11,16,17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Love et al in view of Nakano et al. (newly cited 5,559,789).

For claims 11 and 17, Love et al. disclose a method wherein the mobile unit received pilot power and the base station transmitted pilot power are defined by the ratio  $E_c/I_o$ ,



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and wherein each the  $E_c/I_0$  represents a ratio between energy per chip to interference density (see equation 1 in column 3 line 62).

For claim 19, Love et al. disclose a method wherein the interference measure is linearly related to the initial power level (see column 4 lines 53-55).

For claims 10 and 16, love et al. disclose all the subject matter of the claimed invention with the exception of extracting the mobile unit received pilot power from the transmitted messages in access channel/probe in a communications network. Nakano et al. from the same or similar fields of endeavor teaches the second received data by spreading the data signal by the data channel despreading circuit and obtains received pilot signal by spreading data signal by the pilot channel despreading circuit (see column 5 lines 30-35). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the despreading circuits/extracting circuits as taught by Nakano et al. in the communications network Love et al. The despreading circuits/extracting circuits as taught by Nakano et al. can be implemented/modified by connecting the despreading circuit at the base station of Love et al since the probe signal received at the base station from the mobile station. The motivation for using the despreading

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circuits/extracting circuits as taught by Nakano et al. into the communications network of Love et al being that it provides a need for controlling the forward link communication capacity in response to the forward link interference limitation to maximize the capacity and prevent involuntary dropping of the calls.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7,14,and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Love et al. view of Meidan et al.(newly cited 5,193,102).

For claims 7,14,and 26, Love et al disclose all the subject matter of the claimed invention with the exception of the interference measure being monotonically related to the initial power level in a communications network. Meidan et al. from the same or similar fields of endeavor teaches the estimated carrier to interference power ratio with a metric at least comprising a monotonically related function (see column 18 lines 41-50). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the monotonically interference measure as taught by Meidan et al. in the communications network Love et al. . The monotonically interference measure as taught by Meidan et al. can be modified/implemented into the communications network Love et al since Love also disclose the interference measure but not specific using the monotonically interference measure related to the initial power level. The motivation for using the monotonically interference measure as taught by Meidan et al in the communications network of Love et al. being that it provides

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for improving detection of data bits in data samples and a need for controlling the forward link communication capacity in response to the forward link interference limitation to maximize the capacity prevent involuntary dropping of the calls.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Love et al in view of Nakano et al. as applied to claims 16-17 above, and further in view of Meidan et al.

For claim 20, Love et al and Nakano et al. disclose all the subject matter of the claimed invention with the exception of the interference measure being monotonically related to the initial power level in a communications network. Meidan et al. from the same or similar fields of endeavor teaches the estimated carrier to interference power ratio with a metric at least comprising a monotonically related function (see column 18 lines 41-50). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the monotonically interference measure as taught by Meidan et al. in the communications network Love et al. and Nakano. The monotonically interference measure as taught by Meidan et al. can be modified/implemented into the communications network Love et al since Love also disclose the interference measure but not specific using the monotonically interference measure

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related to the initial power level. The motivation for using the monotonically interference measure as taught by Meidan et al in the communications network of Love et al. and Nakano et al. being that it provides for improving detection of data bits in data samples and a need for controlling the forward link communication capacity in response to the forward link interference limitation to maximize the capacity prevent involuntary dropping of the calls.

8. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

In the remarks of 01/16/2003, applicant traverses the rejection of claims under 35 U.S.C 102 and 103 . The traversal is based on ground that reference does not teach an interference measure based on a power of a pilot signal received at the mobile unit . This argument is not found to be persuasive. applicant's attention is directed at column 3 lines 50-60 wherein it teaches calculating the interference measure based on a power of the pilot signal received at the mobile unit.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANG T TON whose telephone number is 703-305-4739. The examiner can

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normally be reached on MON-WED, 5:30 AM-6:00 PM and Thur 5:30-9:30 A.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on 703-308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

D. Ton  
April 5, 2003



**DANGTON**  
**PRIMARY EXAMINER**